

ABSTRACT OF THE DISCLOSURE

The present invention provides a novel metal complex useful for a reagent for determining the amino acid sequence of protein or peptide, and a method of using it for determining the amino acid sequence of protein or peptide. The metal complex which has a functional group capable of forming a covalent bond with the amino group of the N-terminal amino acid residue of protein or peptide or with the carboxyl group of the C-terminal amino acid residue of protein or peptide. In general, the functional group is in the ligand of the complex. The metal complex is reacted with a protein or peptide (A) of which the amino acid sequence is to be determined, to thereby obtain a metal complex derivative (B) where the covalent bond of the functional group of the metal complex with the amino group of the N-terminal amino acid residue of the protein or peptide (A) or with the carboxyl group of the C-terminal amino acid residue of protein or peptide is formed, and the derivative (B) is analyzed through mass spectrometry to determine the amino acid sequence of the protein or peptide (A).